

**In the claims:**

Please amend claims 4, 7, 8, 12, 14-24, 26, 28, 30, 31, 36, and 38-42 to read as follows:

*Am* 4. A method as defined in claim 2, wherein said polymer is a latex adhesive.

*Am* 7. A method as defined in claim 6, wherein said source of anti-microbial metal ions are selected from the group consisting of silver, copper, zinc, mercury, antimony, lead, bismuth, cadmium, chromium and thallium.

8. A method as defined in claim 7, wherein said metal is silver.

*Am* 12. A method as defined in claim 11, wherein said quaternary ammonium compound is alkyl aryl benzalkonium chloride.

14. A method as defined in claim 1, wherein the adhering of said anti-microbial formulation comprises spraying the anti-microbial formulation onto said absorbent web.

*Am* 15. A method as defined in claim 1, wherein the adhering of said anti-microbial formulation comprises printing the anti-microbial formulation onto said absorbent web.

*Am* 16. A method as defined in claim 1, wherein said absorbent web has at least two surfaces, said anti-microbial formulation being applied to said at least one of said two surfaces of said absorbent web in a pre-selected pattern.

17. A method as defined in claim 16, wherein said anti-microbial formulation covers from about 10% to about 60% of said at least one surface of said absorbent web.

18. A method as defined in claim 1, wherein said anti-microbial formulation covers from about 20% to about 40% of said at least one surface of said absorbent web.

19. A method as defined in claim 16, wherein said anti-microbial formulation covers from about 10% to about 60% of both surfaces of said absorbent web.

20. A method as defined in claim 2, further comprising the step of curing said polymer mixture after said anti-microbial formulation has been applied to said absorbent web.

21. A method as defined in claim 16, further comprising the step of creping said at least one surface of said absorbent web to soften said absorbent web after said anti-microbial formulation has been applied to said absorbent web.

22. A method as defined in claim 1, wherein said fibers of said absorbent web comprise pulp fibers.

23. A method as defined in claim 1, wherein said fibers of said absorbent web comprise synthetic fibers.

24. A method of forming an anti-microbial wiper for disinfecting hard surfaces comprising the steps of:

providing an absorbent base web containing fibers and capable of retaining liquid after a rinse cycle, said absorbent web having two outer surfaces; and

adhering an anti-microbial formulation to said absorbent web, said anti-microbial formulation comprising an anti-microbial agent and a polymer, said anti-microbial formulation containing an anti-microbial agent being capable of activation when said absorbent web is contacted with a liquid, said activation including the release of a

G4  
portion of said anti-microbial agent into the retained liquid to form an anti-microbial solution, said polymer being capable of controlling the rate of release of the anti-microbial agent from the anti-microbial formulation so that said anti-microbial solution is formed after at least five rinse cycles.

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26. A wiper capable of providing liquid anti-microbial solution after numerous rinse cycles comprising:

A3  
a controlled release anti-microbial formulation comprising an anti-microbial agent, which formulation is adhered to  
an absorbent web which retains liquid after each rinse cycle,  
which anti-microbial formulation releases sufficient anti-microbial agent into the retained liquid after each of at least five normal rinse cycles so that the retained liquid is an anti-microbial solution.

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A4  
28. A wiper as defined in claim 27, wherein said polymer is a latex adhesive.

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A7  
30. A wiper as defined in claim 26, wherein said source of anti-microbial metal ions are selected from the group consisting of silver, copper, zinc, mercury, antimony, lead, bismuth, cadmium, chromium and thallium.

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31. A wiper as defined in claim 30, wherein said metal is silver.

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A8  
36. A wiper as defined in claim 28, wherein said quaternary ammonium compound is alkyl aryl benzalkonium chloride.

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A9  
38. A wiper as defined in claim 26, wherein said anti-microbial formulation covers from about 10% to about 60% of said at least one surface of said absorbent web.

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